VIRGINIA
STANDARDS OF LEARNING ASSESSMENTS

Guidelines for Administering the Read-Aloud Accommodation

This document contains guidelines that should be used when administering the read-aloud accommodation for a student taking a Standards of Learning assessment. Students using the read-aloud accommodation must have this accommodation documented on their current IEP, 504 management plan, or LEP participation plan. Use of the read-aloud accommodation is not limited to a specific assessment content area or form, but rather guided by the needs of the student and the decision of the IEP team, 504-management committee, or LEP participation committee. Use of a read-aloud accommodation may be a standard or non-standard accommodation based on the SOL test being administered. In all cases, the Examiner should refer to the Examiner's Manual for the specific SOL test being given to determine the nature of the read-aloud accommodation and the appropriate grid to complete on the student's answer document for the paper test or demographic screen for the online assessment.

Before providing students with any accommodations to SOL testing, Examiners should read and understand three documents related to accommodations and the Virginia Standards of Learning assessments. These are all located in the Examiner's Manual for all SOL tests. They are:

1) Virginia Department of Education's Procedures for Participation of Students with Disabilities in the Assessment Component of Virginia's Accountability System

2) Procedures to Follow in Providing Students with Certain Accommodations on the Virginia Standards of Learning Assessments.

3) Limited English Proficient Students: Guidelines for Participation in the Standards of Learning Assessments.

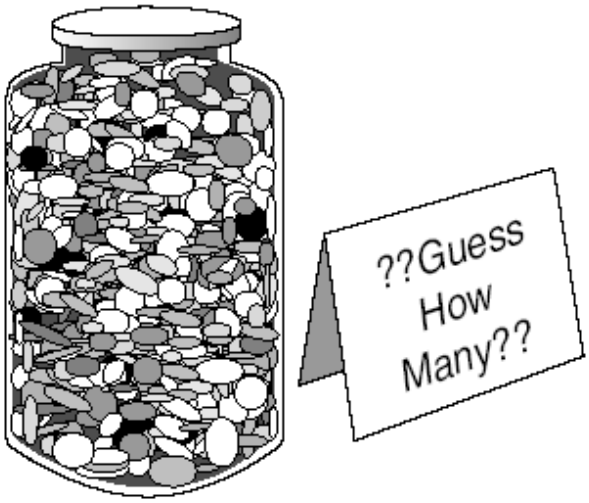
After familiarizing themselves with the above documents, Examiners should refer to this document to understand and model administration of a read-aloud accommodation. It should be noted that examples contained in this document are previously released test items and may or may not have been included within any specific large print, Braille or regular test form used by a student needing a read-aloud accommodation. Example items were chosen based on content and ability to demonstrate how a specific test item would need to be read to the student. In all cases, the Examiner should read the test item and answer choices silently to himself/herself PRIOR to reading aloud the item and answer choices to the student. This is to ensure that the read aloud content does not cue or clue the student to the answer for an item.

In all examples, the actual test item will be displayed, followed by the way the item should be read. In many instances, this will also be followed by an explanation of why the item is read a certain way and what possible issues can arise when reading a specific type of item. "Typical" items were selected to give readers a model for addressing any possible items within SOL assessments.
*Note: For these examples, punctuation should not be read unless spelled out (i.e. comma)

Examples: Mathematics (numerals, symbols, charts, and graphs)

Item 1:

Brooke guessed that there are 605,788 buttons in the jar below.



Which of the following shows 605,788 written in words?

A Six hundred, seventy-eight

B Six hundred five, seven hundred eighty-eight

C Six hundred five thousand, seventy-eight

D Six hundred five thousand, seven hundred eighty-eight

This item should be read:
"Brooke guessed that there are six zero five comma seven eight eight buttons in the jar below. Please refer to the diagram in your test booklet. The diagram has a sign stating, guess how many? Which of the following shows six zero five comma seven eight eight written in words?

A Six hundred, seventy-eight
B Six hundred five, seven hundred eighty-eight
C Six hundred five thousand, seventy-eight
D Six hundred five thousand, seven hundred eighty-eight"

Note: The previous item demonstrates how the examiner might cue the student when reading the item without looking at the answer choices. It is important for the examiner to understand what the item is questioning in order to avoid cueing the student by reading the numbers in a specific way. Because this item is assessing student understanding of how a number is written in words, reading the number in the item would give away the answer.

Item 2:

Virginia covers one hundred two thousand, five hundred fifty-eight square kilometers of land. Which shows this number?

A 1,258
B 12,558
C 102,558
D 1,200,558

This item should be read:
"Virginia covers one hundred two thousand, five hundred fifty-eight square kilometers of land. Which shows this number?

A one comma two five eight
B one two comma five five eight
C one zero two comma five five eight
D one comma two zero zero comma five five eight"

Note: This item demonstrates the same issues as the previous item. However the problem resides in how the answer choices are read to the student.

Item 3:

44.87 ÷ 7 =

A 6.41
B 0.641
C 0.6041
D 0.0641

This item should be read:
"Forty-four point eight seven divided by seven equals
A six point four one
B zero point six four one
C zero point six zero four one
D zero point zero six four one"
Note: Numbers that do not cue or clue answers may be read as written.

Item 4:

The table below shows the number of blocks Susan walked each day last week.

Mon.	Tues.	Wed.	Thur.	Fri.
21	18	15	18	13

What was the mean (average) number of blocks she walked each day?

F 15
G 17
H 18
J 21

This item should be read:
"The table below shows the number of blocks Susan walked each day last week. The table is a two row table read top to bottom, left to right; It says, Monday, twenty-one; Tuesday, eighteen; Wednesday, fifteen; Thursday, eighteen; Friday, thirteen. What was the mean (average) number of blocks she walked each day?

F fifteen
G seventeen
H eighteen
J twenty-one"

Note: Depending on the context, this may also be read as a "five column table read left to right top to bottom". Be sure to slightly pause between columns of information and when saying, "mean (average)"

Item 5:

The numbers in this table follow a linear pattern.

p	*w*
−3	14
−2	11
−1	?
0	5
1	2
2	−1

What is the missing value?

A 7
B 8
C 9
D 10

This item should be read:
" The numbers in this table follow a linear pattern. The table is a seven by two column table read left to right top to bottom; It says, p, w; negative three, fourteen; negative two, eleven; negative one, question mark; zero, five; one, two; two, negative one. What is the missing value?
A seven
B eight
C nine
D ten"

Note: Tables are best read when giving the most relevant information about the stem. In the example above, the student is asked to draw an association between two numbers and the mathematical operation related to those numbers. Therefore, the table must be read so as to demonstrate the connection between column one and column two. A slight pause between each row will enable the student to understand and process the two numbers together.

Item 6:

Note: The item on the following page exemplifies the difficulty with reading complex mathematical tables, items and choices. Please remember that students must not be cued or clued by any information given in a read aloud accommodation to a specific item.

The number of car sales for May 2000 at Auto One are:

	Compacts	Sport UV	Luxury
Bob	**14**	**8**	**6**
Carol	**7**	**13**	**1**
Blanca	**12**	**10**	**8**

If the sales people get a $200 commission on any car they sell, which matrix shows the amount in commissions each earns?

F

	Compacts	Sport UV	Luxury
Bob	2,800	1,600	1,200
Carol	1,400	2,600	200
Blanca	2,400	2,000	1,600

G

	Compacts	Sport UV	Luxury
Bob	214	208	206
Carol	207	213	211
Blanca	212	210	208

H

	Compacts	Sport UV	Luxury
Bob	186	192	194
Carol	193	187	199
Blanca	188	190	192

J

	Compacts	Sport UV	Luxury
Bob	1,600	1,000	800
Carol	900	1,500	300
Blanca	1,400	1,200	1,000

This item should be read:
"The number of car sales for May two thousand at Auto One are, a three by three matrix with column headings from left to right, compacts, sport uv, luxury.
Top row: Bob, compacts fourteen, sport uv eight, luxury six.
Next row: Carol, compacts seven, sport uv thirteen, luxury one.
Last row: Blanca, compacts twelve, sport uv ten, luxury eight.
If the sales people get a two hundred dollar commission on any car they sell, which matrix shows the amount in commissions each earns?

F A three by three matrix with column headings from left to right compacts, sport uv, luxury.
Top row: Bob, compacts two thousand eight hundred, sport uv one thousand six hundred, luxury one thousand two hundred.
Next row: Carol, compacts one thousand four hundred, sport uv two thousand six hundred, luxury two hundred.
Last row: Blanca, compacts two thousand four hundred, sport uv two thousand, luxury one thousand six hundred.

G A three by three matrix with column headings from left to right compacts, sport uv, luxury.
Top row: Bob, compacts two hundred fourteen, sport uv two hundred eight, luxury two hundred six.
Next row: Carol, compacts two hundred seven, sport uv two hundred thirteen, luxury two hundred eleven.
Last row: Blanca, compacts two hundred twelve, sport uv two hundred ten, luxury two hundred eight.

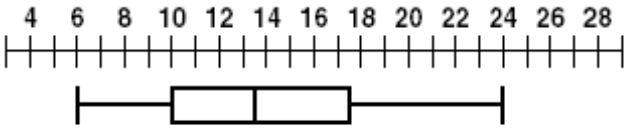
H A three by three matrix with column headings from left to right compacts, sport uv, luxury.
Top row: Bob, compacts one hundred eighty six, sport uv one hundred ninety two, luxury one hundred ninety four.
Next row: Carol, compacts one hundred ninety three, sport uv one hundred eighty seven, luxury one hundred ninety nine.
Last row: Blanca, compacts one hundred eighty eight, sport uv one hundred ninety, luxury one hundred ninety two.

J A three by three matrix with column headings from left to right compacts, sport uv, luxury.
Top row: Bob, compacts one thousand six hundred, sport uv one thousand, luxury eight hundred.
Next row: Carol, compacts nine hundred, sport uv one thousand five hundred, luxury three hundred.
Last row: Blanca, compacts one thousand four hundred, sport uv one thousand two hundred, luxury one thousand."

Note: The previous item demonstrates the need for students to have exposure and use of the read aloud accommodation throughout the school year in instructional and assessment environments. Students must be able to listen carefully to all information while following along in their test booklets. Read aloud accommodations should be provided to students along with a test booklet or use of the online assessment.

Item 7:

Scott made a box-and-whisker graph of the soccer goals made by the players in his district.



What is the range of the goals made by the players?

A 24
B 18
C 6
D 4

This item should be read:
"Scott made a box-and-whisker graph of the soccer goals made by the players in his district. Please refer to the box-and-whisker graph in your test booklet. What is the range of the goals made by the players?
A twenty four
B eighteen
C six
D four"

Note: When a graph is presented containing only numbers, it should be read as, "Please refer to the graph in your test booklet". If the student needs the numbers from the scale read, it should be read as " A box-and-whisker graph with a horizontal scale numbered from four to twenty eight in increments of two; please refer to the graph in your test booklet".

Item 8:

$$\begin{cases} x + y = 4 \\ x - y = 2 \end{cases}$$

Which is the solution to the system of equations shown?

F $x = 1, y = 3$
G $x = 2, y = 2$
H $x = 3, y = 1$
J $x = 4, y = 0$

This item should be read:
" A system of equations. Top row, x plus y equals four, bottom row, x minus y equals two. Which is the solution to the system of equations shown?
F x equals one, y equals three
G x equals two, y equals two
H x equals three, y equals one
J x equals four, y equals zero"

Item 9:

Which is equivalent to

$$(3 + 2i)(2 + 5i)?$$

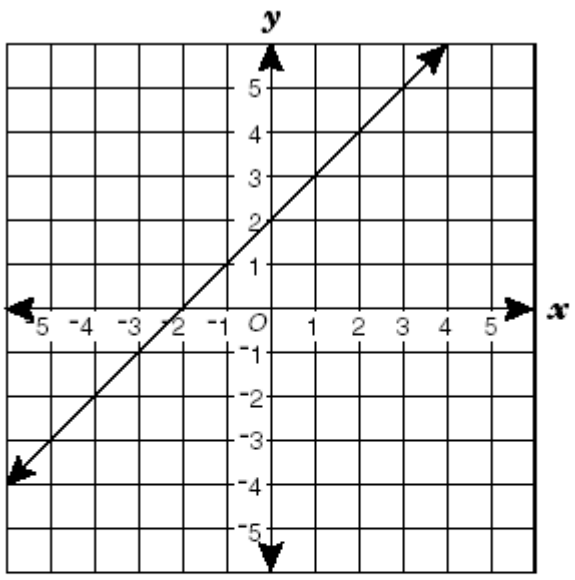
A $-4 + 19i$
B $16 + 19i$
C $6 + 29i$
D $6 - 10i$

This item should be read:
"Which is equivalent to the quantity three plus two i times the quantity two plus five i
A negative four plus nineteen i
B sixteen plus nineteen i
C six plus twenty nine i
D six minus ten i"

Note: Symbols, signs and operations may be read as indicated as long as reading aloud the symbol, sign or operation does not cue or clue the student to the correct response.

General note: Although many mathematical operations, tables, charts, graphs and signs are not given in the examples shown, the Examiner should use care to ensure that reading aloud any information does not clue the student to the correct response. When in doubt, the Examiner should use the statement, "Please refer to the _____ in your test booklet."

Item 10:



Which equation best describes this graph?

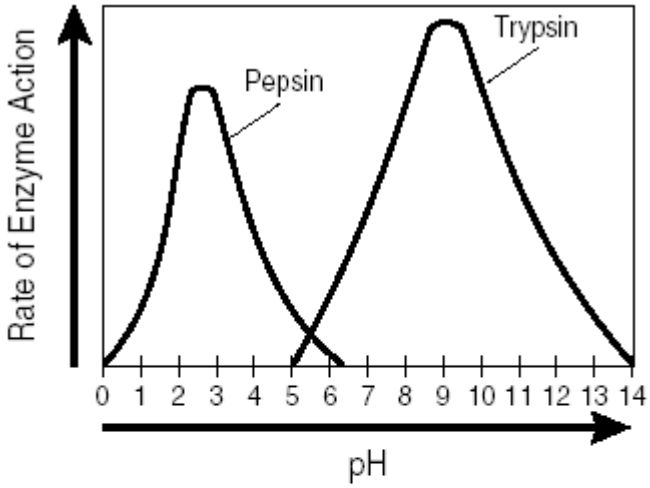
A $y = {}^{-}x$
B $y = 2x + 2$
C $y = x - 2$
D $y = x + 2$

This item should be read:

"Which equation best describes this graph? Please refer to the graph in your test booklet.
A y equals negative x
B y equals two x plus two
C y equals x minus two
D y equals x plus 2"

Note: Since there are no labels or language contained in the graph, the student's ability to read the graph is not hindered by language issues. The following item shows a different graph containing language that needs to be read to the student.

Item 11:



This graph shows that —

A more enzymes are present at a higher pH

B pepsin is less sensitive to pH than trypsin

C pepsin is less effective at low pH than trypsin

D pH affects the activity rate of enzymes

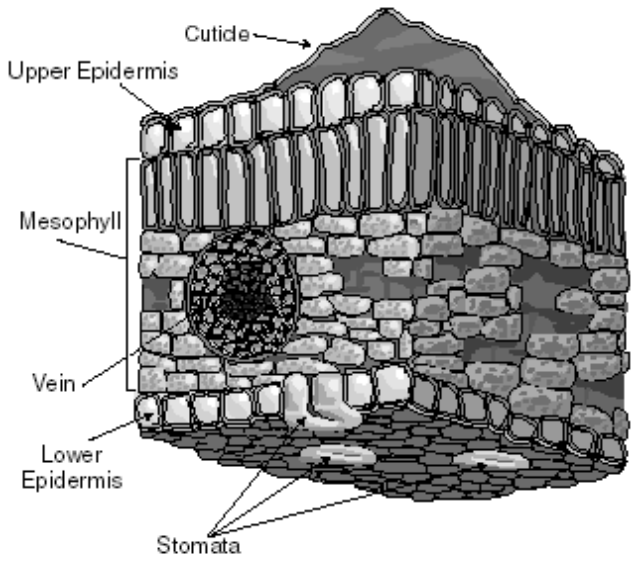
This item should be read:
"A graph whose x axis is ph in increments of one from zero to fourteen. The y axis is rate of enzyme action. The graph has two labels from left to right, pepsin, trypsin. Please refer to the graph in your test booklet. This graph shows that

A more enzymes are present at a higher pH
B pepsin is less sensitive to pH than trypsin
C pepsin is less effective at low pH than trypsin
D pH affects the activity rate of enzymes"

Note: In this example, the student's ability to decode the language contained in the graph may hinder his or her ability in answering the question. The language contained in the graph needs to read to the student, not explained.

Examples: Science (notations, process, formulas, tables, and charts)

Item 1:



Which area of the leaf is most responsible for protecting the leaf from the drying effects of the air?

A The epidermis
B The mesophyll
C The vein
D The cuticle

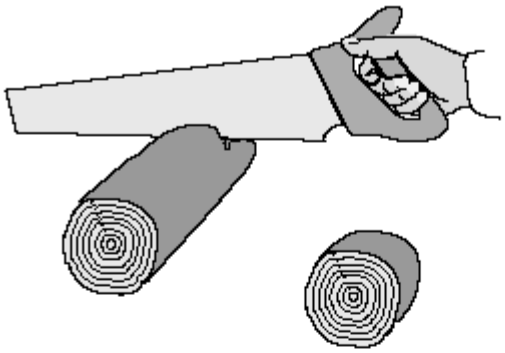
This item should be read:
"A diagram labeled from top to bottom, cuticle, upper epidermis, mesophyll, vein, lower epidermis, stomata. Please refer to the diagram in your test booklet. Which area of the leaf is most responsible for protecting the leaf from the drying effects of the air?
A the epidermis
B the mesophyll
C the vein
D the cuticle"

Note: When reading an item with a complex diagram, the Examiner must take care to only read the text contained in the diagram. Part of the skill required of the student taking the test is the ability to analyze and understand the diagrams presented. A read-aloud accommodation should not provide additional assistance with diagrams, charts, or tables by having them explained.

Item 2:

Which of these <u>best</u> shows a change in a state of matter?

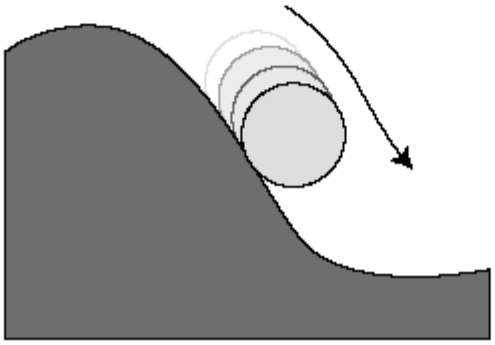
A



B

C

D



This item should be read:
"Which of these best shows a change in a state of matter? Please refer to the answer choices in your test booklet. A, B, C, D."

Note: Some items may contain graphic representations as answer choices. In these instances, it is always safer to simply refer the student to the graphics contained in the stem or answer choices. Once again, it is inappropriate for an Examiner to interpret or describe the graphics contained within an item.

Item 3:

$$Zn + 2HCl \rightarrow ZnCl_2 + H_2$$

If 0.600 gram of zinc is used, what is the amount of zinc chloride that is produced in the above reaction?

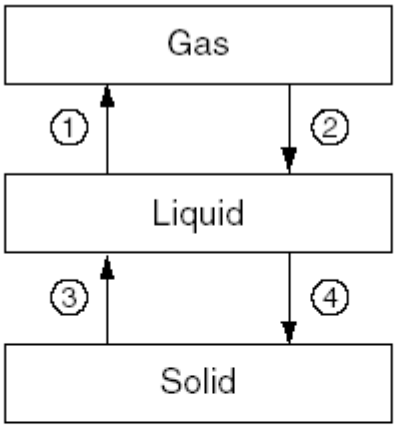
F 0.125 gram
G 1.25 grams
H 12.5 grams
J .018 gram

This item should be read:
" Zn plus two HCl yields ZnCl two plus H two. If zero point six zero zero gram of zinc is used, what is the amount of zinc chloride that is produced in the above reaction?

F zero point one two five gram
G one point two five grams
H twelve point five grams
J point zero one eight gram."

Note: As in the mathematics examples, symbols or processes may be read as long as reading the symbol or process does not cue the answer for the student.

Item 4:



Which numbered process represents condensation?

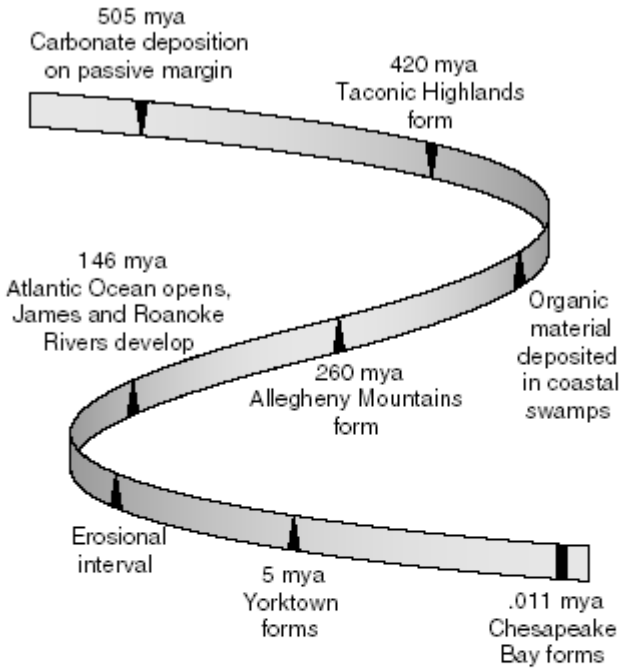
F 1
G 2
H 3
J 4

This item should be read:
" A diagram labeled from top to bottom, gas, liquid, solid. Please refer to the diagram in your test booklet. Which numbered process represents condensation?

F one
G two
H three
J four"

Note: In the event that the student also needs the numbered points read to them, the Examiner should include the statement, " The diagram has four points labeled left to right, top to bottom, first row, one, two; second row, three, four." after reading the labels contained on the diagram.

Item 5:



According to the geologic time chart of Virginia shown above, the *most* recent formation in Virginia is the —

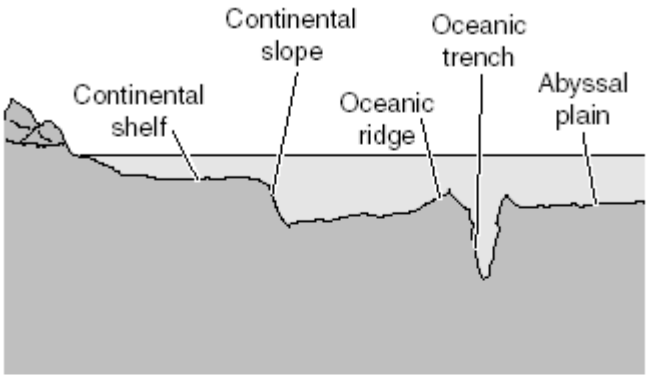
F Allegheny Mountains
G Chesapeake Bay
H James River
J Taconic Highlands

This item should be read:
" A time chart labeled from top to bottom, five hundred five million years ago, Carbonate deposition on passive margin; four hundred twenty million years ago, Taconic Highlands form; Organic material deposited in coastal swamps; two hundred sixty million years ago, Allegheny Mountains form; one hundred forty six million years ago, Atlantic Ocean opens, James and Roanoke Rivers develop; Erosional interval; five million years ago, Yorktown forms; point zero one one million years ago, Chesapeake Bay forms. Please refer to the time chart in your test booklet. According to the geologic time chart of Virginia shown above, the most recent formation in Virginia is the

F Allegheny Mountains
G Chesapeake Bay
H James River
J Taconic Highlands"

Note: Examiners should be careful when reading time charts or time lines not to refer to the "beginning and ending" or "starting at" and "ending with". These terms may cue the answer as in the previous question. Examiners should read the question to themselves first and make a judgment as to the best way to read the question without cuing the answer.

Item 6:



Algae and other producers need lots of sunlight. Most ocean algae would be found in the water —

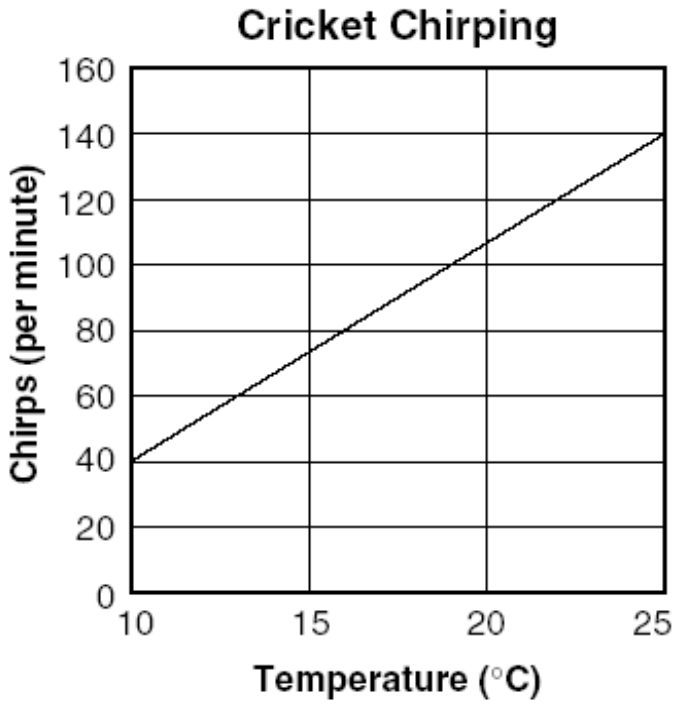
A on the abyssal plain
B in the oceanic trench
C above the continental shelf
D beside the continental slope

This item should be read:
" A diagram labeled from left to right, continental shelf, continental slope, oceanic ridge, oceanic trench, abyssal plain. Please refer to the diagram in your test booklet. Algae and other producers need lots of sunlight. Most ocean algae would be found in the water

A on the abyssal plain
B in the oceanic trench
C above the continental shelf
D beside the continental slope"

Note: If the Examiner would rather refer to the "diagram" as a "drawing", the statement, " A diagram labeled from left to right, continental shelf, continental slope, oceanic ridge, oceanic trench, abyssal plain. Please refer to the diagram in your test booklet", would read, " A drawing labeled from left to right, continental shelf, continental slope, oceanic ridge, oceanic trench, abyssal plain. Please refer to the drawing in your test booklet." This could also be replaced with "illustration", "picture", "figure", "graphic", etc.

Item 7:



Crickets chirp to attract other crickets. The temperatures and rates of their chirping are graphed above. Which statement below is most likely true for the data represented in the graph?

F The cooler the temperature, the louder the crickets chirp.

G The crickets cannot chirp at temperatures lower than 10°C.

H The warmer the temperature, the more often crickets chirp.

J The temperature and the chirping of crickets are not related.

This item should be read:

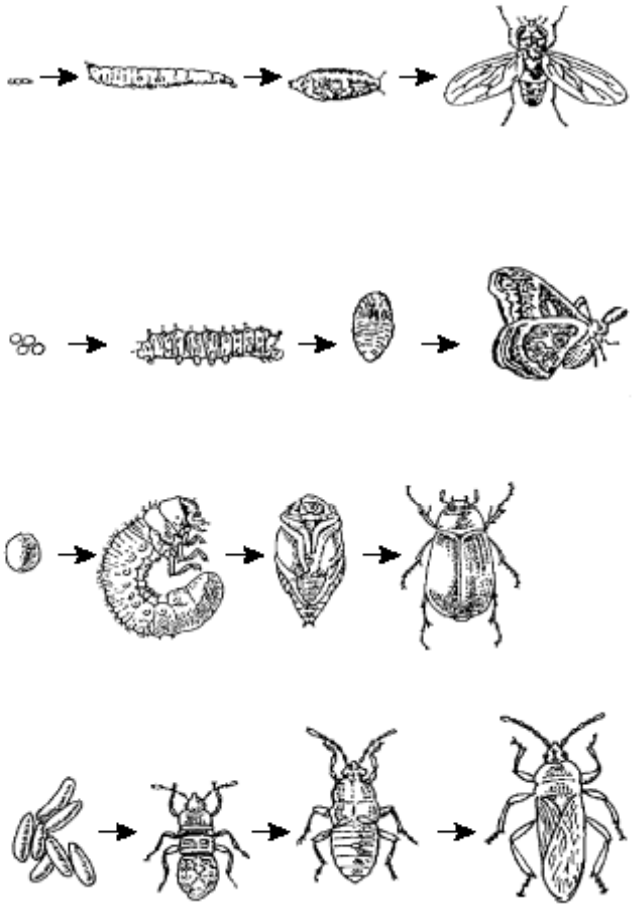
" A graph titled, Cricket Chirping. The x axis is temperature in degrees Celsius, in increments of five from ten to twenty five. The y axis is chirps per minute in increments of twenty from zero to one hundred sixty. Please refer to the graph in your test booklet. Crickets chirp to attract other crickets. The temperatures and rates of their chirping are graphed above. Which statement is most likely true for the data represented in the graph?

F The cooler the temperature, the louder the crickets chirp.
G The crickets cannot chirp at temperatures lower than ten degrees Celsius
H The warmer the temperature, the more often crickets chirp.
J The temperature and the chirping of crickets are not related.

Note: The Examiner may read "degrees Celsius" within the graph since the item is not assessing this information. As was stated earlier, if the Examiner is unsure of what the item is testing, the Examiner should simply say, "Please refer to the graph in your test booklet."

Item 8:

Which of these shows an animal that looks similar to its parent during its life after hatching?

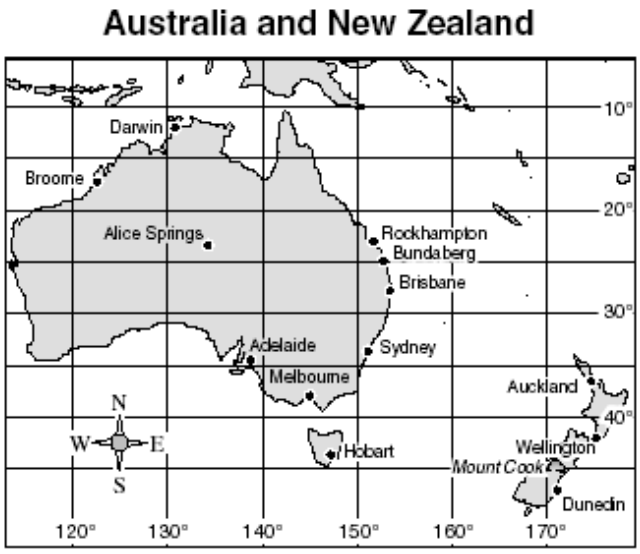


This item should be read:
"Which of these shows an animal that looks similar to its parent during its life after hatching? Please refer to the diagrams in your answer choices. F, G, H, J. "

Note: Further explanation of answer choices may cue the student to the correct response.

Examples: History (maps, diagrams, pictures, etc.)

Item 1:



Which of the following cities is located *closest* to 20° south latitude and 150° east longitude?

F Rockhampton
G Bundaberg
H Brisbane
J Sydney

This item should be read:
"A map titled, Australia and New Zealand. Please refer to the map in your test booklet. Which of the following cities is located closest to twenty degrees south latitude and one hundred fifty degrees east longitude?

F Rockhampton
G Bundaberg
H Brisbane
J Sydney"

Note: For many items containing complex maps, it may be impossible to accurately read aloud the contents of the map without making the question too complex for the student to understand. In these cases use the statement, "Please refer to the map in your test booklet."

Item 2:

Which of the following is located *closest* to the place where the equator and prime meridian meet?

A Libreville
B Accra
C Kinshasa
D Dakar

This item should be read:
"A map titled, Africa. Please refer to the map in the test booklet. Which of the following is located closest to the place where the equator and prime meridian meet?

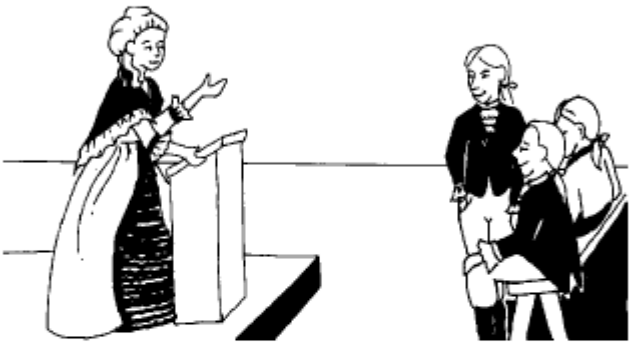
A Libreville
B Accra
C Kinshasa
D Dakar"

Item 3:

Which picture shows what Betsy Ross was known for?

F

G



H

J

This item should be read:
" Which picture shows what Betsy Ross was known for? Please refer to the pictures in your answer choices. A, B, C, D."

Note: By attempting to describe or explain the pictures in this item could cue the student to the correct response. When in doubt, refer the student to the test booklet.

Item 4:

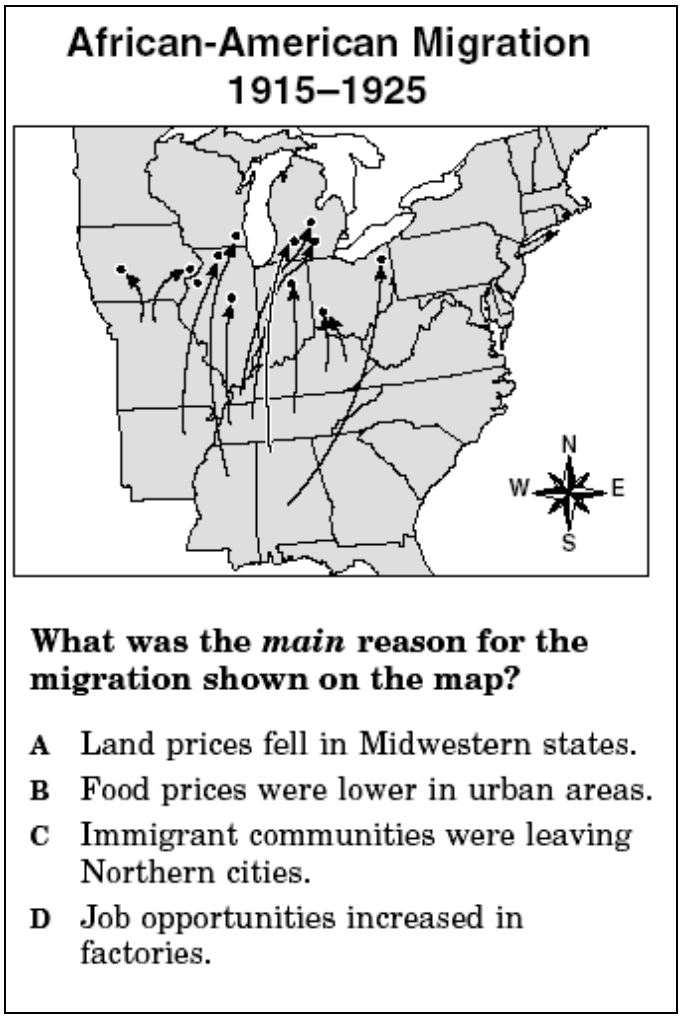
The style of building in the picture is *most* closely associated with —

A ancient Greece
B ancient Rome
C the Byzantine Empire
D the Ming Dynasty

This item should be read:
"The style of building in the picture, please refer to the picture in your test booklet, is most closely associated with

A ancient Greece
B ancient Rome
C the Byzantine Empire
D the Ming Dynasty"

Item 5:



This item should read:
" A map titled, African-American Migration from nineteen fifteen to nineteen twenty five. Please refer to the map in your test booklet. What was the main reason for the migration shown on the map?

A land prices fell in Midwestern states.
B food prices were lower in urban areas.
C immigrant communities were leaving Northern cities.
D job opportunities increased in factories."

Examples: General graphics, charts, diagrams, pictures, symbols, etc.

Item 1:

In sentence 18, the month of July should be written —

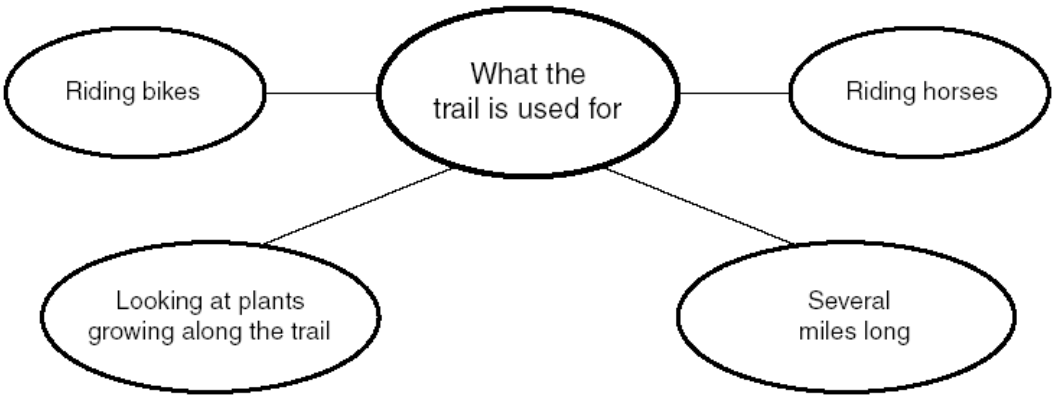
F the Month of July
G the month of july
H the Month Of July
J as it is

This item should be read:
"In sentence eighteen, the month of July should be written
F the Month of July
G the month of july
H the Month Of July
J as it is"

Note: The Examiner should not indicate differences in punctuation or capitalization when reading this passage to the student. The student should be following along in the test booklet and be able to choose the correct response by examining possible answer choices in the test booklet along with the read aloud information. It is important to remember that the read aloud accommodation should not be used in isolation from a test form. All read aloud accommodations are accompanied by a test form that the student uses in conjunction with the read aloud accommodation.

Item 2:

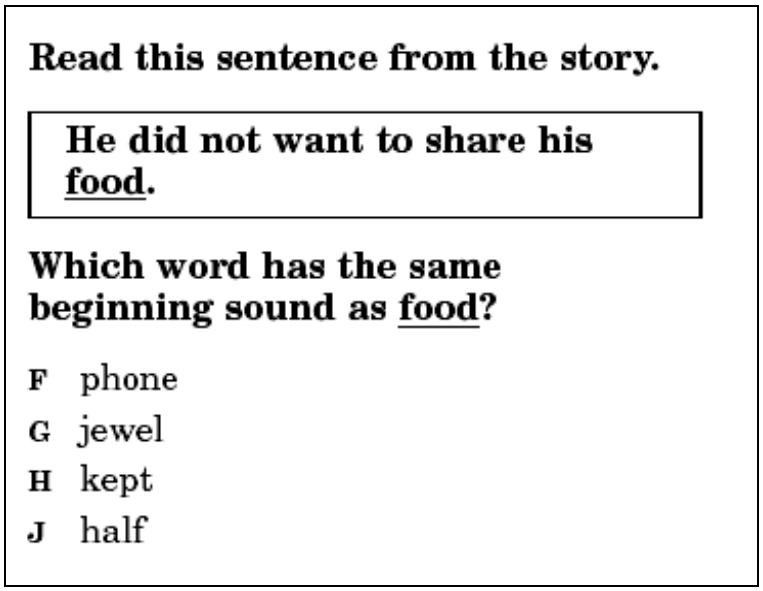
Jimmy made this web. Use it to answer questions 14 and 15.



This item should be read:
"Jimmy made this web. Use it to answer questions fourteen and fifteen. A web containing five cells labeled from left to right, top to bottom; first row, riding bikes, what the trail is used for; riding horses; second row, looking at plants along the trail; several miles long. Please refer to the web in your test booklet."

Note: When reading webs or diagrams with multiple cells or locations, the Examiner should try to read the web as a regular student would negotiate the information. Since most students would read the web from left to right and top to bottom, the initial read aloud should follow the most comfortable format. If the Examiner had stated that the central cell or circle contained, "what the trail is used for" and then described the surrounding circles, the information might cue or clue an answer as to the main topic of this web. Reading the questions associated with the web may help the Examiner in reading aloud the web without cuing any possible answer choices.

Item 3:

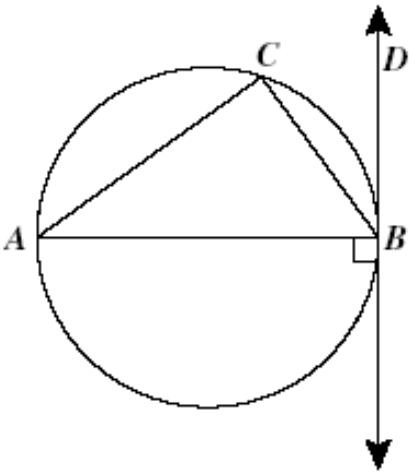


This item should be read:
" Read this sentence from the story. He did not want to share his food. Which word has the same beginning sound as food? Please refer to the answer choices in your test booklet. F, G, H, J."

Note: It is not possible to read aloud the answer choices for this item. By reading the choices, the student will be given the answer. The Examiner must instruct the student to refer to the possible answer choices.

Item 4:

$\overleftrightarrow{BD}$ **is tangent to the circle at** B **and the measure of** $\overset{\frown}{AC}$ **is 108°.**



What is the measure of $\angle CBD$**?**

A 118°
B 72°
C 36°
D 18°

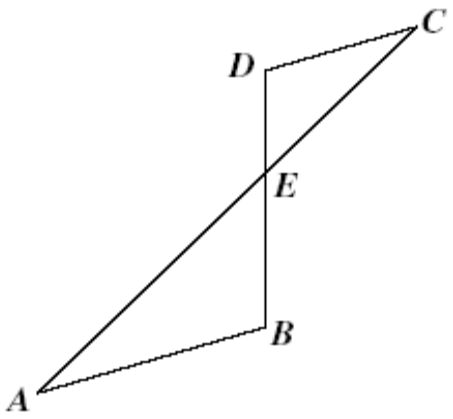
This item should be read:
"Line BD is tangent to the circle at B and the measure of arc AC is one hundred eight degrees. Please refer to the diagram in your test booklet. What is the measure of angle CBD?

A one hundred eighteen degrees
B seventy two degrees
C thirty six degrees
D eighteen degrees"

Note: Examiners should be familiar with all symbols that might be included in a specific type of test question. This can only be ensured by using Examiners familiar with the content area being assessed. Common symbols and how to read them are included at the end of this section.

Item 5:

Line segments AC and BD intersect at E, as shown in the figure. $\overline{AB} \parallel \overline{CD}$, $DE = 10$, $BE = 15$, and $CE = 20$.



What is the measure of $\overline{AE}$?

A 13
B 17
C 25
D 30

This item should be read:
"Line segments AC and BD intersect at E, as shown in the figure. Please refer to the figure in your test booklet. Line segment AB is parallel to line segment CD, DE equals ten, BE equals fifteen and CE equals twenty. What is the measure of line segment AE?

A thirteen
B seventeen
C twenty five
D thirty"

Note: In many instances, the stem may refer the reader to a figure or drawing. It is appropriate for the read aloud administration to refer the reader to the same figure or drawing immediately after reading the section of the stem that directs the reader as in the example above.

Items containing abbreviations and symbols:

Below is a listing of common symbols and abbreviations. It is important to remember to read the question and possible answer choices **BEFORE** reading any symbols or abbreviations aloud to ensure that the question will not be cued or clued for the student by having the material read aloud.

Common Mathematical and General Symbols:

+ - Read as "plus" or "positive"
- - Read as "minus" or "negative"
x - Read as "x" or "multiplied by" or "times"
÷ - Read as "divided by"
> - Read as "greater than"
< - Read as "less than"
≥ - Read as "greater than or equal to"
≤ - Read as "less than or equal to"
~ - Read as "similar to"
√‾ - Read as "the square root of"
≈ - Read as "is equivalent to"
© - Read as "copyright"
↔ - Read as "line" (in mathematical operations)
→ - Read as "ray" (in mathematical operations); "yields" (in scientific operations)
∠ - Read as "angle" (in mathematical operations)
Δ - Read as "triangle" (in mathematical operations) "delta" (in scientific operations)
— - When present over two points, read as "line segment" (in mathematical operations)
Example:
$\overline{CD}$ -would be read as "line segment C D"
⁀ - When present over two points, read as "arc" (in mathematical operations)
Example:
$\overset{\frown}{AC}$ - Would be read as "arc A C"
& - Read as "and"
% - Read as "percent"
$ - Read as dollar amount
Example: $4.57 - would be read as " four dollars and fifty seven cents"
- Read as "number"
¢ - Read as "cents"
Example: .45¢ - would be read as "forty five cents"
= - Read as "equals" or "equal to"
≠ - Read as "not equal" or "not equal to"
® - Read as "registered"
@ - Read as "at"
... - Read as "ellipsis"
" " - Read as "quote" and "end of quote"
Example: "Give me liberty or give me death" should be read as "quote, Give me liberty or give me death, end of quote"

Abbreviations:
Common:
ac - Read as "alternating current" (in scientific operations)
bp - Read as "boiling point" (in scientific operations)
C - Read as "Celsius" (in scientific operations)
cu ft - Read as "cubic foot"
db - Read as "decibel"
dc - Read as "direct current" (in scientific operations)
F. - Read as "Fahrenheit" (in scientific operations)
ft - Read as "foot"
g - Read as "gram" or "gravity" (be sure to read and understand the question and answer choices) *
gal - Read as "gallon"
hp - Read as "horsepower"
Hz - Read as "hertz" (in scientific operations)
in. - Read as "inch"
K - Read as "Kelvin" (in scientific operations)
kw - Read as "kilowatt"
kwh - Read as "kilowatt hour"
lb - Read as "pound"
mo - Read as "month"
mol wt - Read as "molecular weight" (in scientific operations)
mp - Read as "melting point" (in scientific operations)
mph - Read as "miles per hour"
msec - Read as "millisecond"
ppm - Read as "parts per million" (in scientific operations)
psi - Read as "pounds per square inch"
qt - Read as "quart"
oz - Read as "ounce"
rpm - Read as "revolutions per minute"
SD - Read as "standard deviation" (in mathematical operations)
sec - Read as "second"
sq - Read as "square" (in mathematical operations)
T - Read as "absolute temperature" (in scientific operations)
tbsp - Read as "tablespoonful"
tsp - Read as "teaspoonful"
v - Read as "volt"
w - Read as "watt"
yd - Read as "yard"
yr - Read as "year"
wk - Read as "week"
U.S.A. - Read as "United States of America
Va. - Read as "Virginia"
* Individual letters may be read as variables. (Example: g - 45 = 2z; read as g minus forty-five is equal to two z. (be sure to read and understand the question and answer choices.)

Lengths of Measure:
mm - Read as "millimeter"
cm - Read as "centimeter"
dm - Read as "decimeter"
m - Read as "meter"
dam - Read as "decameter"
hm - Read as "hectometer"
km - Read as "kilometer"
mym - Read as "myriameter"
μ - Read as "micron"
mμ - Read as "millimicron"

Weights:
mg - Read as "milligram"
cg - Read as "centigram"
dg - Read as "decigram"
g - Read as "gram"
dag - Read as "decagram"
hg - Read as "hectogram"
kg - Read as "kilogram"
myg - Read as "myriagram"
q - Read as "quintal"
ng - Read as "nanogram"

Recommendations:

For more information about read aloud forms, format, and/or procedures; please refer to your Examiner's Manual or Division Director of Testing. Information is also available online at: http://www.pen.k12.va.us/VDOE/Assessment/home.shtml

For more information about pronunciation and guidelines used to read aloud materials for individuals with visual impairments, refer to the National Braille Association Tape Recording Manual. Information about obtaining a copy of the Manual and current trends in recording and reading for the blind may be found online at: http://www.w3.org/2000/08/nba-manual/ and http://www.nationalbraille.org/

Use of this material is voluntary in administering read aloud accommodations for students using Virginia Standards of Learning assessments. It is the responsibility of the test Examiner to ensure that test security and validity be maintained at all times. Read aloud accommodations must follow established procedures developed by the Division of Assessment and Reporting available online at: http://www.pen.k12.va.us/VDOE/Assessment/SWDparticipation.pdf

Questions or Comments related to this document and/or the read aloud accommodation may be directed to the Division of Assessment and Reporting:

Mail questions or comments to:
Read Aloud Accommodation Guidelines
Virginia Department of Education
Division of Assessment and Reporting
101 N. 14th. Street
James Monroe Bldg., 22nd. Floor
Richmond, Va. 23219

E-mail questions or comments to: nsparks@mail.vak12ed.edu,

Phone questions or comments to: (804) 225-2102.